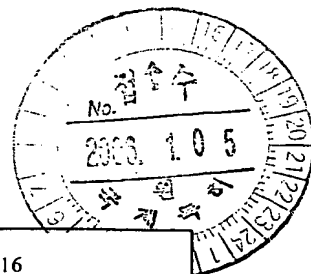


## PATENT COOPERATION TREATY

## PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)


(PCT Article 36 and Rule 70)



Applicant's or agent's file reference 4FPO-08-34	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. <b>PCT/KR2004/002338</b>	International filing date(day/month/year) <b>14 SEPTEMBER 2004 (14.09.2004)</b>	Priority date (day/month/year) 15 SEPTEMBER 2003 (15.09.2003)
International Patent Classification (IPC) or national classification and IPC <b>A61K 36/254(2006.01)i, A23L 1/29(2006.01)i, A61P 15/10(2006.01)i</b>		
Applicant <b>KOREA RESEARCH INSTITUTE OF BIOSCIENCE AND BIOTECHNOLOGY et al</b>		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
  - a. ☐ (sent to the applicant and to the International Bureau) a total of \_\_\_\_\_ sheets, as follows:
    - ☐ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
    - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
  - b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) \_\_\_\_\_ containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:
  - ☒ Box No. I Basis of the report
  - ☐ Box No. II Priority
  - ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - ☒ Box No. IV Lack of unity of invention
  - ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - ☐ Box No. VI Certain documents cited
  - ☐ Box No. VII Certain defects in the international application
  - ☐ Box No. VIII Certain observations on the international application

Date of submission of the demand <b>26 APRIL 2005 (26.04.2005)</b>	Date of completion of this report <b>03 JANUARY 2006 (03.01.2006)</b>
Name and mailing address of the IPEA/KR  Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140	Authorized officer <b>YEO, Ho Sup</b> Telephone No. 82-42-481-5627

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/KR2004/002338

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☒ This report is based on translations from the original language into the following language English which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
- ☒ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☒ the international application as originally filed/furnished
- ☐ the description:
- pages \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the claims:
- pages \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the drawings:
- pages \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

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## Box No. IV Lack of unity of invention

1. ☒ In response to the invitation to restrict or pay additional fees the applicant has, within the applicable time limit:
  - ☐ restricted the claims
  - ☒ paid additional fees
  - ☐ paid additional fees under protest and, where applicable, the protest fee
  - ☐ paid additional fees under protest but the applicable protest fee was not paid
  - ☐ neither restricted nor paid additional fees.
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is :
  - ☐ complied with.
  - ☒ not complied with for the following reasons:
 

Claim 7 is directed to a health food, and claim 8 is directed to a pharmaceutical composition.

Although claims 7 and 8 are relevant to the composition comprising the same active ingredient, there is no technical relationship among a pharmaceutical composition and health food.

Hence, the application contains the following separate groups of inventions not so linked as to form a single general inventive concept (PCT Rule 13.1) :

    - i ) Claims 1-7
    - ii ) Claims 1-6 and 8
4. Consequently, this report has been established in respect of the following parts of the international application :
  - ☒ all parts.
  - ☐ the parts relating to claims Nos.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims	3	YES
	Claims	1, 2, 4-8	NO
Inventive step (IS)	Claims	3	YES
	Claims	1, 2, 4-8	NO
Industrial applicability (IA)	Claims	1-8	YES
	Claims		NO

**2. Citations and explanations (Rule 70.7)**

The present invention relates to a composition for the improvement or treatment of erectile dysfunction, comprising an alcohol extract of ogalpi(= *Acanthopanax Cortex*) as an active ingredient.

The following document has been considered for the purpose of this report :

D1 = JP 2000-319191 A (21. 11. 2000)

**1) Novelty & Inventive step**

Claims 1, 2 and 4-8 relate to an alcohol extract of ogalpi such as *Acanthopanax senticosus*, and a composition comprising the same as an active ingredient for the improvement or treatment of erectile dysfunction.

The cited document D1 states that an alcohol extract of *Acanthopanax senticosus* has the cGMP-phosphodiesterase inhibitory activity and is useful for preventing and treating erectile dysfunction.

Therefore, the subject-matter of claims 1, 2 and 4-8 is neither novel nor inventive (PCT Article 33(2) and 33(3)).

(Continued on Supplemental Sheet.)

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.  
Continuation of:

Box V.

On the other hand, claim 3 relates to an extract of *Acanthopanax divaricatus* var. *albeofructus* for improving erectile dysfunction.

Even though D1 are relevant to the present invention, it does not describe the use of *Acanthopanax divaricatus* var. *albeofructus* extract for improving or treating erectile dysfunction.

As a consequence, claim 3 meets the criteria set out in PCT Article 33(2) and 33(3).

2) Industrial applicability.

Claims 1–8 meet the criteria set out in PCT Article 33(4).